



May/June 2019

Xplor



**THANKS,
MOM!**

RAISING A WILD CHILD
TAKES HARD WORK

CONTENTS

FEATURES

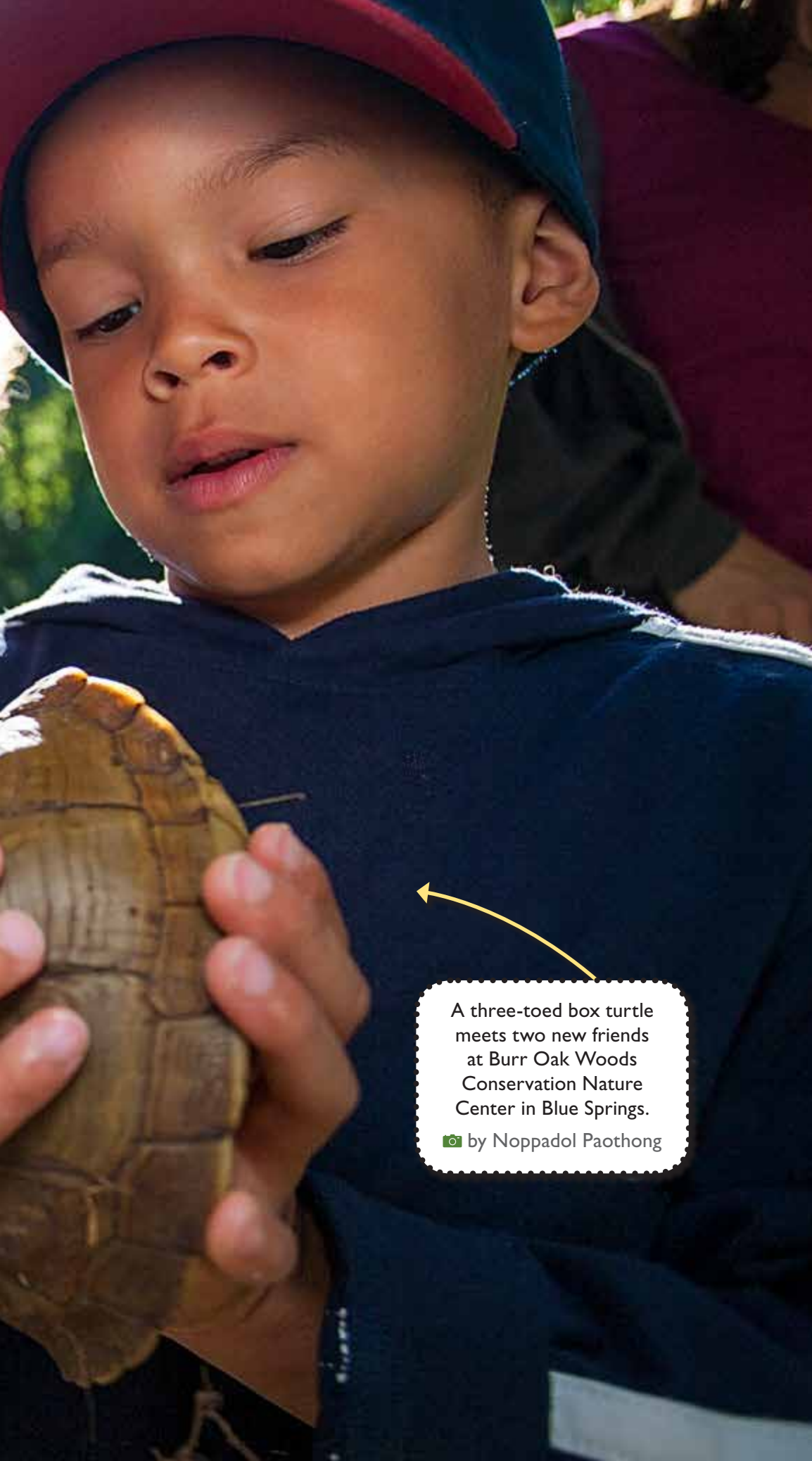
6 Thanks, Mom!
Young critters have lots to celebrate on Mother's Day.

10 Ways of the Whitetail
There's more to deer than may appear.

DEPARTMENTS

- 2** Get Out!
- 3** What Is It?
- 4** Into the Wild
- 16** Predator vs. Prey
- 17** Strange but True
- 18** How To
- 20** Xplor More





A three-toed box turtle
meets two new friends
at Burr Oak Woods
Conservation Nature
Center in Blue Springs.

by Noppadol Paothong



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ON THE COVER

White-Tailed Deer
by Noppadol Paothong

GET OUT!

FUN THINGS TO DO
AND GREAT PLACES
TO DISCOVER NATURE



**WATCH FOR
LIGHTNING BUGS
ON WARM NIGHTS.**



Bluegill begin spawning in May.
**SEE IF YOU CAN SPOT
THEIR CIRCULAR NESTS
IN SHALLOW WATER.**

LEARN PROPER FISH HANDLING AND MORE at
Cane Pole Fishing for Families June 4. Program runs from
10 a.m.–noon at Busch Conservation Area in St. Louis.
Email Scott.Sarantakis@mdc.mo.gov to register by May 31.



Crappie

**GO NUTS FOR
BERRIES.** Wild
gooseberries,
raspberries,
and mulberries
ripen in June.



Gooseberries



**BE BEAR
AWARE.**

One-and-a-
half-year-old
male black
bears may be
on the move
in the Ozarks.

**GIG SOME
BULLFROGS
OR GREEN
FROGS.**

Season begins
at sunset
June 30.



Lightning bug: David Cappaert, Bugwood.org

WHAT IS IT?

DON'T KNOW?
Jump to Page 20 to find out.



- ❶ I'm a bottom-feeder most of the time.
- ❷ But my mate has another thing in mind.

- ❸ She packs all her eggs onto my back.
- ❹ And I keep them safe until they hatch.

Into the WILD

rural roadside

Plenty of interesting plants and animals live life near the fast lane.



Heads Up!

Assassin bugs are best observed at a distance. The tiny predators can deliver a painful bite!

LOOK

With all those flowers, roadsides are aflutter with butterflies. Pack a net and see how many you can catch.



Clouded sulphur



Checkered white



Black swallowtail



Monarch



Red admiral

Do More

Carry a trash bag in your car so you can put roadside litter in its proper place.

Did You Know?

Most critters would get a terrible tummy ache — or die — if they ate rotten meat. But not turkey vultures. Acid in a vulture's stomach is so strong that it kills nearly all germs. By eating roadkill, vultures — nature's cleanup crew — keep germs from spreading.



Take a Closer Look

If you've lost your sense of direction, find a compass plant. The large lower leaves on these sunflower-like plants usually grow with their edges pointing north and south.



Compass plant

LOOK

Weedy areas alongside roads harbor a variety of rodents and reptiles. Birds of prey perch nearby, hoping to nab an easy meal.



Barred owl

At dawn and dusk, you might catch a glimpse of this owl snoozing on a fence post.

American kestrel

This blue jay-sized falcon often hovers over medians, waiting to pounce on prey.



Red-tailed hawk

This large hawk rests on tree branches, fence posts, and road signs during the day.

What Happened Here?



Baby spittlebugs suck sap from plants and turn it into spitlike foam. The bugs snuggle inside the slobber to stay safe from predators and the heat of the sun. Although the foam looks like saliva, it's not. It actually comes from a spittlebug's other end.

Butterfly milkweed

New England aster

Wild bergamot

LOOK

Zippering along a rural highway can feel like driving through a rainbow. Wildflowers of every color bloom beside the road from spring through fall. How many of these fancy plants can you spot?

Listen

Woodchucks often dig burrows under roadside fence rows. When they're scared or surprised, these chubby squirrels give a loud, shrill whistle to warn family members of danger.



Thanks, Mom!

by Bonnie Chasteen

**Share the love
with wildlife
moms this
Mother's Day**

Everything from bugs to birds to bears has a mom that laid an egg or gave birth. Wildlife moms like bears work hard to raise their young, and others like turtles just look for the best nesting place they can find. Either way, wildlife moms spend lots of energy bringing young critters into the world. Spotting wild families in our woods, prairies, and streams is one of the best things about spring. Thanks, mom!

Rainbow Trout

Before she lays her eggs, a mother rainbow trout will fan a shallow nest in the riffles with her tail. After the male fertilizes the eggs, she will swim upstream and fan up a little more gravel. This will wash down and settle over the eggs, protecting them until they hatch.

How you can help

Do your part to keep trash and pollution out of streams, especially in the Ozark region. Wild trout need clean, cold water to thrive.



Virginia Opossum

Possum moms have childcare in the bag. Literally. Newborn possum babies creep into their mom's tummy pouch, where they nurse until they are fully formed. Even after they leave the pouch, babies will ride on mom's back until they are about 4 ½ months old.

How you can help

Possums are wild animals, so help them stay that way. Don't leave out pet food or smelly trash that will attract them close to your house.



Killdeer

Killdeer parents often scrape out a shallow basin in bare soil or gravel, and mom will lay her eggs among the dirt or rocks. If a predator comes too close, both mom and dad will fake a broken wing to lure it away. Once the eggs hatch, the babies leave their dusty cradle in a day or two, ready to scratch for themselves.

How you can help

Steer clear of bird nests wherever you find them. Leaving nests alone helps keep predators from detecting them and gives parents the peace they need to keep eggs warm until they hatch.



American Black Bear

Mama bears keep a sharp eye on their cubs, especially when the family is out foraging for food. If a cub cries, mom comes running. And if a strange bear (or human) comes too close, the mama bear will charge the challenger.

How you can help

Are you in the Ozarks? Then you're in Missouri's bear country. Be bear aware, and give bears plenty of room if you see them in the wild. To keep bears from sniffing around your place, don't leave out pet food, livestock food, or smelly garbage and greasy grills.

Monarch

To help their young get off to a good start, monarch moms lay their eggs on milkweed plants. These are the only kinds of plants their caterpillars can eat. After they hatch, caterpillars gobble about 200 times their hatch-weight in milkweed leaves before they become chrysalises.

How you can help

If you have a sunny spot in your yard, plant some milkweeds there. Be sure to get plants grown without insecticides. Monarchs will visit your milkweeds, and you may soon find striped caterpillars chomping the leaves.



Monarch adult

Monarch caterpillar



IMAGE NO. RL1 2005HE016 01 © SHELDON, ALLEN BLAKE / ANIMALS ANIMALS

Crayfish

Mama crayfish carry their eggs under their tails using little legs called swimmerets. Mom waves her swimmerets back and forth to keep water moving around the eggs. When the eggs hatch, the baby crayfish will hang on to mom's tail for a little while before dropping off.

How you can help

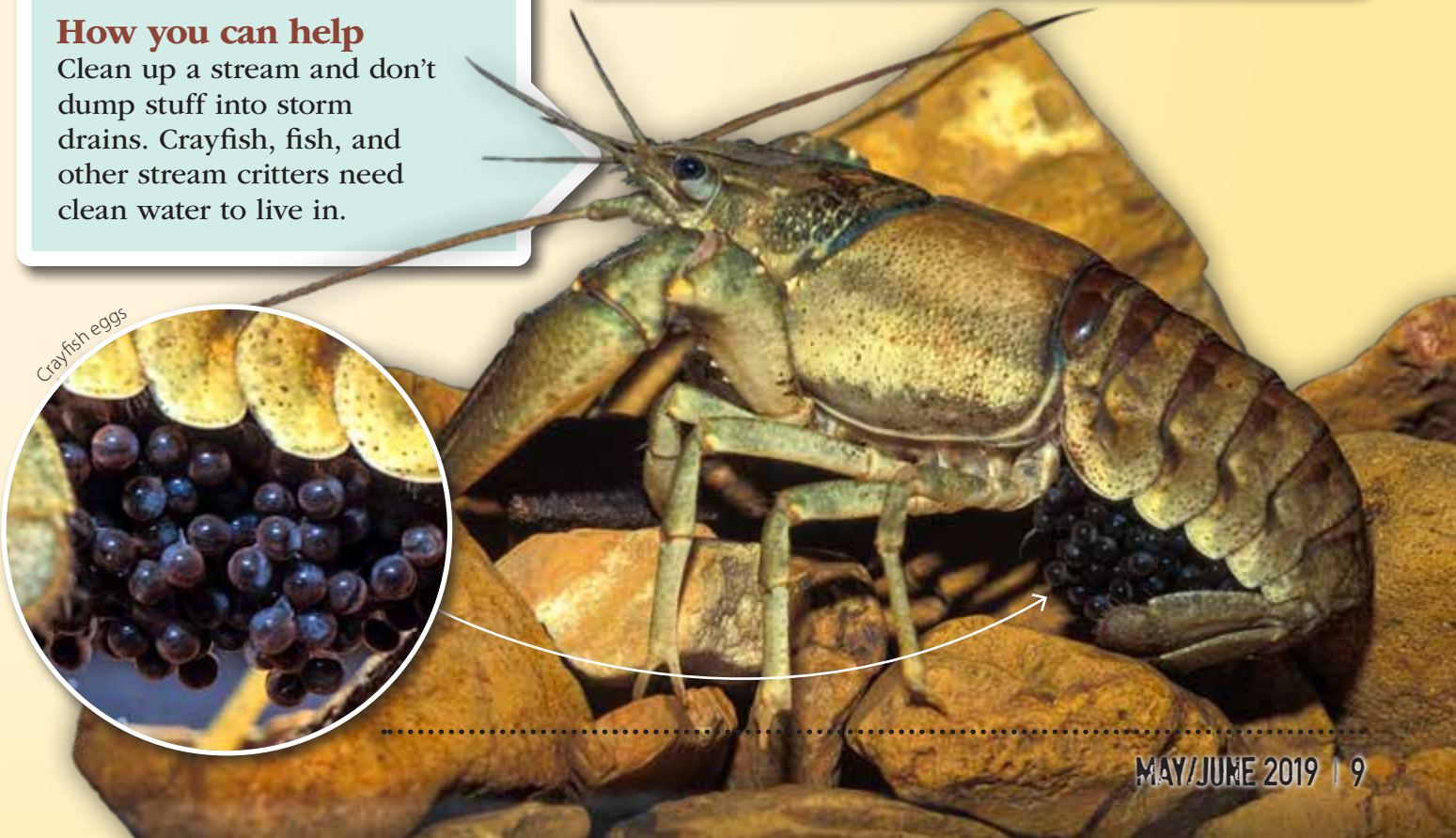
Clean up a stream and don't dump stuff into storm drains. Crayfish, fish, and other stream critters need clean water to live in.

Five-Lined Skink

These lizard moms brood their eggs, just like birds do. They wrap their bodies around or over their eggs, and they remove rotten eggs from the nest. Skink moms stay with their eggs until they hatch.

How you can help

Five-lined skinks occur statewide. If you have a rocky, south-facing slope, you probably have skinks. Keep your pets away from them, and they'll do just fine.



Crayfish eggs



Ways of the

WHITTETAIL

by Matt Seek

Let's follow some white-tailed deer for a year and see what life's like in the thundering herd.

Milk Mustaches for Everyone

This mama deer is feeding milk to her babies. The fawns were born in early June. As newborns, they were barely bigger than bread loaves. But within an hour, they could stand on their skinny legs and take their first wobbly steps. Now — thanks to mom's milk — look how big they've grown!

All that growing wears them out. Like most babies, fawns need lots of rest. They curl into balls and snooze in tall grass or soft leaves. Sunshine streaming through overhead vegetation casts spots of light on the ground. The fawns' spotty fur helps them blend in with this speckled backdrop.

Double Trouble

A mama deer usually gives birth to twin fawns, but singles and triplets aren't uncommon.



6095148: © STEVE BYLAND | DREAMSTIME.COM

SUMMER

Herd Words

Female deer are called does (rhymes with nose). Male deer are called bucks. Young deer are called fawns.



There's a Fawn on My Lawn

If you find a fawn in your yard, don't worry. The little deer isn't an orphan. Mama whitetails often leave their babies by themselves.

Young fawns are nearly odorless. To keep from soiling their babies with their stronger scents, does visit just a few times a day. If danger approaches, a fawn's heartbeat slows down, and its breathing nearly stops. Predators can't smell the fawn, hear its heart, or see the tiniest twitch of movement.

So if you find a fawn, leave it alone and keep pets inside. Rest assured that mom will return to take care of her youngster.

Arms Race

While mama deer are busy raising babies, bucks are busy growing new headgear. Antlers sprout in spring. At first, they look like furry bumps covered in fuzzy, blood-rich skin called velvet. But as summer sweats on, blood vessels carry calcium and other minerals to the stubby antlers, and they grow bigger and bigger. At the peak of growth, a deer may add half an inch to its antlers each day.

The sunny months are a peaceful time for bucks. They hang out in small groups, eat together, and groom each other like oversized house cats. During summer, bucks behave like they're best buddies. But once autumn arrives, they turn into fierce foes.



Buck Battle

Crack! Crunch! Crash! Mud flies as two bucks scuffle through the underbrush, pushing each other around with their antlers. The bucks are equal in size, and their shoving match stretches for several long minutes. Finally, with a grunt, one of the white-tailed warriors gives up and trots away. Usually, neither deer gets hurt during these buck battles. The strongest, pushiest deer earns the chance to mate with more does.

Fluffier in the Fall

Each hair in a deer's thick winter coat is filled with air. The air acts as insulation to keep the deer toasty.





00570658 © DONALD M. JONES / MINDEN PICTURES

Hardcore Headgear

By late August, blood stops flowing to the antlers, and they quit growing. The velvet dries out and peels off. Bucks rub their hardened headgear on trees and bushes. This scrapes off the itchy velvet and polishes the antlers until they gleam. The scuffed-up bark left behind on the tree tells other deer where the buck has been.



00466450 © MARK RAYCROFT / MINDEN PICTURES



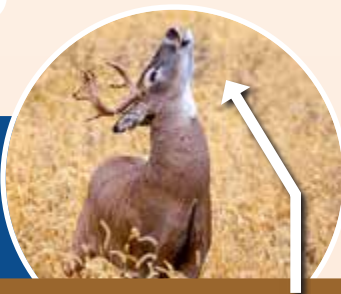
Four Stomachs to Fill

To a deer, the world is one big salad bar. They clip tender green leaves and pluck berries from bushes, using their nimble lips to take only the tastiest nibbles. In the fall, they gobble down acorns, turning the protein-rich nuts into layers of fat and shaggy fur coats that will keep them warm during winter.

The next time your tummy growls, think of a deer. When a whitetail gets hungry, it doesn't have just one stomach to fill. It has four! The extra chambers help deer get as many nutrients as possible from tough-to-digest plants.

Hello, Deer

Whitetails communicate with each other in a variety of ways.



STAMPS

When whitetails are startled or annoyed, they stamp their hooves hard on the ground.

SOUNDS

A scared deer may blow out a raspy, high-pitched snort. Does call to their babies with soft grunts. And when fawns want their mommies, they bleat like lambs.



SCENTS

Bucks paw up the soil and leave their scents on the scrapes for other deer to smell. If a doe is interested in a buck, she may leave her scent on his scrape, too.



TAILS

Deer swish their tails lazily from side to side when they're relaxed. But if a deer gets scared, it raises its tail like a flag and flares out the white hairs on the underside. This warns other deer of danger.

WINTER

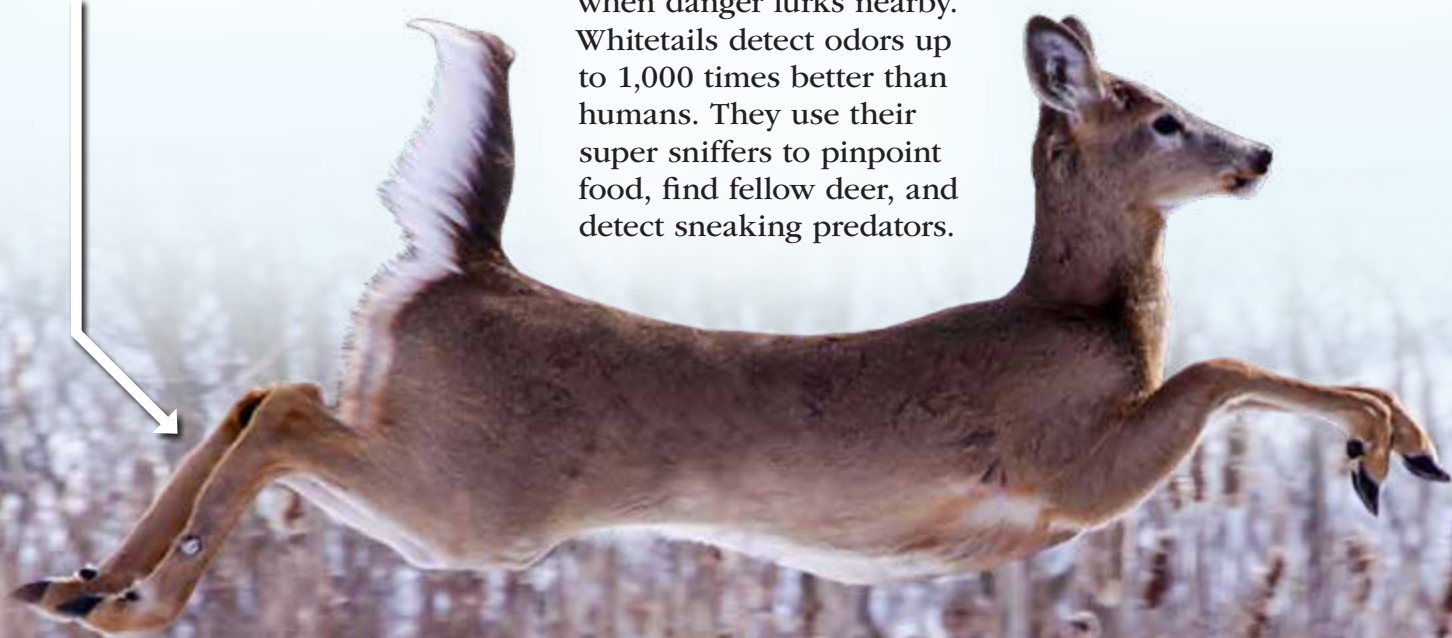
Deer Defenses

Sproing! White-tailed deer are the kings of spring, able to leap over 8 feet into the air. They can run 35 mph for short distances and swim up to 13 mph when they have to.



Each of a deer's ears is like a mini satellite dish, able catch the slightest of sounds. A whitetail can turn one ear in one direction and the other in a different direction. This helps it hear in two directions at once. *Shhhhh!* It might hear us.

A deer's nose knows when danger lurks nearby. Whitetails detect odors up to 1,000 times better than humans. They use their super sniffers to pinpoint food, find fellow deer, and detect sneaking predators.



Survival Season

Winter brings lean times for whitetails. Blankets of snow cover up food, and deer often collect in crop fields to search for crumbs of grain that farmers missed. Howling winds force deer to huddle in cedar thickets, and bitter temperatures send them to south-facing hillsides to seek sunshine.



Antlers Away!

Don't feel bad for this buck. He didn't break his antler. It fell off on its own.

When mating season winds down, the bone tissue that joins a buck's antlers to his skull begins to weaken. Soon the antlers become wobbly, like loose teeth. By February, most bucks have dropped, or shed, their well-used headwear.

Lost antlers don't go to waste. They become "vitamins" for squirrels, mice, and rabbits. The buck-toothed critters gnaw on them and use the calcium in the antlers to build strong bones and teeth.



Spring into Antlers

Once a buck sheds his antlers, a new pair immediately begins growing.



The Doe Says Go

When tender shoots push up through the soggy spring soil, female deer search for safe habitats in which to have their babies. Before giving birth, a doe chases away her young from the previous year. This ensures that her new fawns have the nursery all to themselves. Sometimes a doe's older kids don't want to leave. So she has to show them tough love by swinging her sharp hooves at them. The yearlings stay away for a few months, but in the fall, young females rejoin their moms. Together once again, the young does help their moms teach the fawns the remarkable ways of the whitetail.

THIS
ISSUE:

Illustrated by
David Besenger

SUMMER TANAGER VS NORTHERN PAPER WASP

Top Billing

The bird has sharp eyes and strong wings, but it leads with its beak.

Bottom Bayonet

The little wasp also has super sight and wing power, but its stinger can deliver big pain.

AND THE WINNER IS...

Big win for the male tanager. He snaps the wasp right out of the air, bashes it against a branch, and feeds it to his nestlings.

STRANGE but TRUE!

YOUR GUIDE TO ALL THE
UNUSUAL, UNIQUE,
AND **UNBELIEVABLE** STUFF
THAT GOES ON IN NATURE



To find food in the dark, bats emit sounds and listen as they echo off of nearby insects. But some **MOTHS** have a sort of invisibility cloak — sound-muffling fur on their wings — that helps them hide from moth-munching bats.

The amount of food eaten by baby **BARN SWALLOWS** may seem hard to, well, swallow. From hatching until leaving the nest, swallow chicks gobble nearly 100,000 insects. This requires mom and dad to feed the babies up to 350 times a day!



Baby **BEAVERS** leave the lodge when they're about 2 years old. Although it's funny to think mom and pop give their buck-toothed bambinos the boot, biologists believe young beavers leave by choice so they can start families of their own.



Salad for breakfast? During hibernation, **BLACK BEARS** may go 100 days without eating. When they wake up from their winter snoozes, they eat grasses and other green vegetation to restart their sleepy digestive systems.

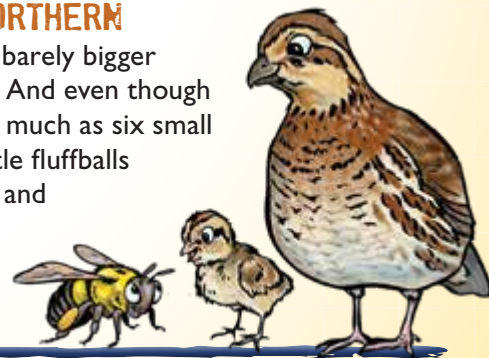


WOOD NYMPH BUTTERFLIES

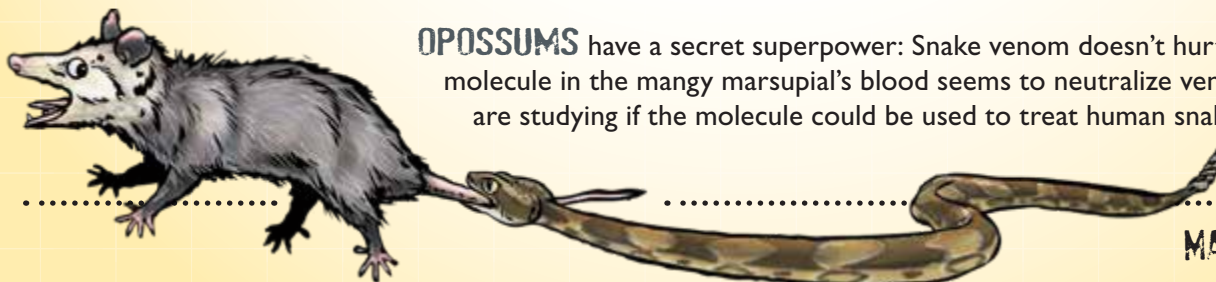
have ears in their armpits. To be more specific, their ears are located at the base of their wings. Air-filled tubes in the wings act like hearing aids and funnel sounds to the ears.



Newly hatched **NORTHERN BOBWHITES** are barely bigger than a bumblebee. And even though they weigh only as much as six small paper clips, the little fluffballs can scurry around and catch insects soon after exiting their eggs.



OPOSSUMS have a secret superpower: Snake venom doesn't hurt them. A molecule in the mangy marsupial's blood seems to neutralize venom. Scientists are studying if the molecule could be used to treat human snakebite victims.



HOW TO

Ditch the Itch

Poison ivy doesn't have to get under your skin. With a little practice, you can learn to identify and avoid Missouri's most irritating plant.

LEAVES OF THREE, LEAVE IT BE

Each poison ivy leaf is made up of three leaflets. What makes things tricky is that many harmless plants also have leaves with three leaflets. To sort the harmful from the harmless, look for these clues — but don't look too closely!

- The leaves grow alternately. That means you'll find one leaf on one side of the stem and another leaf a little farther up on the other side of the stem.
- Poison ivy leaflets have pointed tips, and they usually have notches along their edges.
- Poison ivy leaves are usually shiny. They stay green all summer but turn red early in the fall, often before other leaves change colors.
- The middle leaflet is symmetrical. This means if you were to fold it in half (definitely not advised), the two sides would match. The side leaflets are not symmetrical.
- The middle leaflet has a long stalk that connects it to the main stem. The side leaflets have shorter stalks.

Poison ivy

grows in every corner of Missouri. It's found in prairies, forests, fields, and marshes. It may even turn up in your backyard. The plant can grow in a clump like a shrub or climb up trees like a vine.



Leaf
Leaflet





Yellow-rumped warbler

ZAPPED BY THE SAP

Poison ivy is covered with a sticky but invisible sap. When you touch any part of the plant — even its roots — the sap sticks to your skin. If you're allergic to poison ivy — and most of us are — wherever the sap touches soon breaks out in an itchy, red, blistery rash.

Some people think you can catch poison ivy from another person's blisters. Not true! The liquid inside the blisters is a fluid our bodies produce. It isn't sap. But anything that touches poison ivy can carry its sap for years. So don't worry about leaky blisters. Worry about washing your clothes, your garden tools, your pets — anything that may have come into contact with the itch-causing plant.

RASH RELIEF

If you touch poison ivy, wash your skin with lots of cool running water. The sooner you wash, the better your chance of removing the sap and preventing a rash.

If you get a rash, putting a cool, wet washcloth over the itchy areas can bring relief. For more annoying rashes, ask your parents for anti-itch cream. Whatever you do, don't scratch the blisters. Germs can get into your open skin and cause an infection.

A poison ivy rash usually isn't a serious problem. But if your rash doesn't disappear in a few weeks, if it spreads to your eyes or mouth, or if you have trouble breathing, go to the doctor!

A LITTLE LOVE FOR AN UNLOVABLE PLANT

You may not like poison ivy, but animals love it. Birds gobble up the plant's white berries. Rabbits, deer, and other mammals munch on its glossy leaves. Thick stands of poison ivy offer small animals a place to hide. And the plant's ability to grow nearly anywhere helps keep soil from washing away.

XPLOR·MOR

Find Your Flock



Take this quiz to find out which flock you'd rock if you were a bird.

For each question, circle the letter next to the answer that best describes you.

1. Where's your favorite place to go for dinner?

- A. Any place with a salad bar suits me fine.
- B. A grill would be great. Give me meat, meat, and more meat.
- C. Seafood sounds swell — the fresher the better.
- D. Forget dinner! Bring me dessert.
- E. Let's hit a buffet. I want a little of everything.

2. Describe your dream house.

- A. Give me a one-story ranch and a wide-open yard.
- B. Put me in a penthouse high above the city.
- C. A waterfront bungalow would make a big splash for me.
- D. I don't need much space. A tiny house suits me fine.
- E. As long as it's a treehouse, I'll live anywhere.

3. What's your favorite Olympic sport?

- A. Swimming.
- B. Track.
- C. Diving.
- D. Fencing.
- E. Forget the Olympics. I'd rather play hide-and-seek.

4. You're in a band. What instrument do you play?

- A. Trumpet.
- B. Electric guitar.
- C. Maracas.
- D. I just hum.
- E. I can play anything.

5. How would your friends describe you?

- A. Loyal.
- B. Well-traveled.
- C. Daring.
- D. Feisty.
- E. Clever.

6. You've been bitten by the love bug. What's the best way to win your heart?

- A. Opposites don't attract. I want someone who's just like me.
- B. Send me a snuggle buddy.
- C. You'd better bring me a gift.
- D. No one likes a show off — except for me.
- E. A kiss is the only way to know if it's true love.

WHAT IS IT?

— FROM PAGE 3 —

or eat. When they're not mating, giant water bugs can bite, paralyze, and suck the juices out of small prey like frogs, fish, turtles, and snakes. The giant water bug's other name? Toe-biter. Learn more at mdc.mo.gov/field-guide.

This male giant water bug looks like something has laid eggs on its back. And something has — a female giant water bug. The male will protect the eggs until they hatch. During this time, he won't fly



E

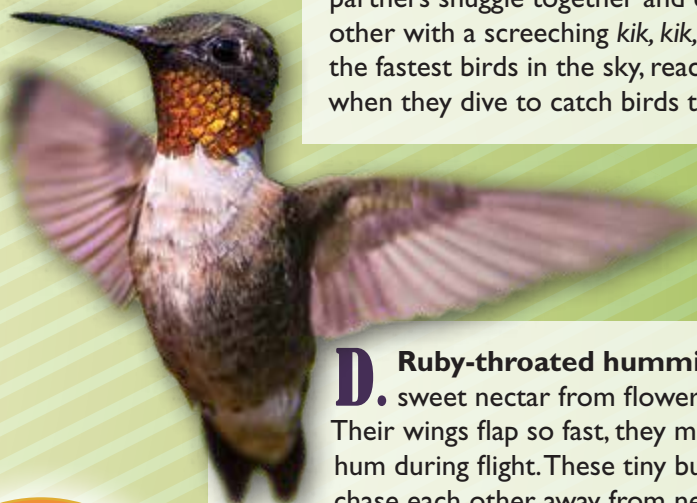
Which letter did you circle most?



A. Canada geese nest on the ground where there's grass to snack on and water to swim in. Geese call to their flocks with hornlike honks. Although they come in different sizes, each Canada goose picks a mate that's about its same size. They stay loyal to their partners for the rest of their lives.



B. "Peregrine" means "wanderer," and the well-named **peregrine falcon** nests atop cliffs and skyscrapers on every continent except Antarctica. During courtship, peregrine partners snuggle together and call to each other with a screeching *kik, kik, kik*. They are the fastest birds in the sky, reaching 200 mph when they dive to catch birds to eat.



D. Ruby-throated hummingbirds drink sweet nectar from flowers and feeders. Their wings flap so fast, they make a buzzing hum during flight. These tiny but feisty birds chase each other away from nectar sources and fight with their swordlike beaks. To show off for females, males make looping, U-shaped flights. Females build a tiny nest that's barely bigger than a thimble.



To learn more about your fine feathered friends, fly on over to mdc.mo.gov/field-guide.

C. Belted kingfishers burrow into stream banks to build their nests. To catch fish to eat, these daring birds dive beak-first into the water. Males bring females a fish and feed it to them during courtship. Their calls, which sound like a baby's rattle or maraca, warn other kingfishers to stay away.



E. Clever **blue jays** make many sounds and can even imitate hawks to scare other birds away from a feeder. Jays eat a variety of foods, including insects, eggs, and seeds. They hide acorns during fall and seek them out for snacks during winter. During spring, they nest in trees. Blue jay couples "kiss" by nibbling on each other's beaks.

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CRITTER CORNER

Eastern Coachwhip



This snake can grow up to 60 inches long, and it lashes like a whip when caught. It might as well be called greased lightning because that's how fast it is. Once it was believed the coachwhip could chase and whip people. But that's a myth. It pursues prey like mice, lizards, and small snakes. In Missouri, it lives in dry, rocky landscapes in the southern half of the state. Learn more at mdc.mo.gov/field-guide.